

Antibiotic tracking: Do the Danes have it right?

By: Sarah Gonzalez

WASHINGTON, July 4, 2013- European farmers follow regulations meant to lower antibiotic use in animal production, but the practice and the data still vary widely from farm to farm and country to country.

Arguments that antibiotic medication is used judiciously in animal production are invalid as long the reporting and publishing of its usage is unreliable, said English former pig farmer and first chief executive of the British National Pig Association, Mike Sheldon.

Sheldon shared his perspective with Illinois Farm Bureau members visiting England during a [European Union market study tour](#) last week. A former pig farmer in the United Kingdom and employee of the Pig Improvement Company, Sheldon is critical of any lack of medication tracking in animal agriculture.

“If we don't put our house in order, gather and publish that data, then we have no argument at all,” he said regarding judicious use of antibiotics and other farm medication. Calling it “unforgivable that we don't record that data,” he commented that “the Danes have got it right” when it comes to antibiotic tracking.

In Denmark, a yellow and red card system ensures producers who use antibiotics in a non-compliant way will be fined and published on a public list. Danish pig farmer Claus Jorgensen said “regulators must know exactly what medications are used.”

Anything used in the pigs' food and water “is a yellow card,” he said. “Individual injections are alright, but only for pigs you know need it.”

The Danish Veterinary and Food Administration implemented the Yellow Card system in 2010. If producers use more than the set limit of antibiotics in their operation, they receive a yellow card and subsequent increased scrutiny, veterinarian visits and the information published publicly.

Asger Nielsen of the Danish Food and Ag Council compared antibiotic usage between Holland and Denmark, which have roughly the same number of pigs.

“But in Holland, antibiotic use is twice as much,” due to Denmark's strict standards, he told Illinois Farm Bureau market study participants.

Danmap, the Danish Programme for surveillance of antimicrobial consumption and resistance in bacteria, uses data on all medicines prescribed by veterinarians registered at farm and species level by the official VetStat programme since 2001. In 2011, the total veterinary consumption of antimicrobial agents represented a 15 percent decrease compared to 2010, mainly attributed to a decreased consumption in pigs, reported Danmap.

Hans Aarestrup, CEO of the Association of Danish Pig Producers said antibiotic use dropped 25 percent after Denmark implemented the yellow card system. “But also, the yellow card is based off double the average use,” he said. “Now it's become a quota, so use is moving up again.”

According to data from the Association of Danish Pig Producers presented by Aarestrup, antibiotic use fell almost thirty percent from 2009, but now usage is up again to just ten percent below 2009 levels.

Although agricultural groups and the Animal Health Institute in the U.S. continue to doubt any scientific linkage between antibiotic use in food animals and resistance in humans, the pressure on European and American antibiotic usage for production animals is not expected to ease. In June, the G8 Science Ministers met in London as part of the UK's G8 Presidency, where they focused on antibiotic resistance as a global danger.

“There is a growing realisation that the overuse of antibiotics and a failure to invest in new treatments could leave us without many of the tools that doctors take for granted today,” said Paul Nurse, President of the Royal Society, ahead of the meeting.

In a statement published during the meeting, the science ministers said they decided to act on developing the scientific input necessary to reduce antimicrobial resistance.

Additional activities will include curbing the misuse of antibiotics for “human, veterinary and aquaculture use,” supporting targeted research to understand the development of resistance, and developing diagnostics to better inform antimicrobial drug usage.

Back in the U.S. several lawmakers want to add their own types of restrictions on antibiotic use.

Senator Dianne Feinstein, D-Calif., recently introduced legislation to limit the use of antibiotics in livestock production. If enacted, the “[Preventing Antibiotic Resistance Act of 2013](#)” would direct the Food and Drug Administration (FDA) to restrict the use of antibiotics critical to human health in livestock production unless they are used to treat clinically diagnosable diseases.

Also this year, Rep. Louise Slaughter, D-N.Y., introduced similar legislation in the House. According to the National Sustainable Agriculture Coalition, this is the fifth attempt since 2003 in both the House and Senate to pass legislation restricting the use of antibiotics.

Many representatives of the U.S. agriculture industry resist legislative direction on antibiotic usage. The Animal Health Institute currently supports Food and Drug Administration (FDA) efforts phase out growth promotion uses and phase in veterinary oversight for antibiotics that are used in human medicine. The U.S. FDA conducted joint meetings with the USDA's Animal and Plant Health Inspection Service (APHIS) to discuss their plan for judicious use of antimicrobials in medicated feed or drinking water of livestock.

The National Cattlemen's Beef Association (NCBA) defended the U.S. industry's use of antibiotics in a briefing to congressional staff members last week. Mike Apley, a clinical pharmacologist with Kansas State University, explained how antibiotics in the beef industry are used judiciously as a tool to maintain herd health.

“Producers use antibiotics under the guidance of a veterinarian, and extensive regulations govern the use of animal health drugs. Many factors go into ensuring that veterinarians, farmers and ranchers have access to effective antibiotics to maintain animal health,” said Apley.

“Unfortunately, there are a lot of misconceptions and outright misrepresentations about why and how antibiotics are used in the cattle industry.”